4

Docket No.: MGM-10002/02

REMARKS

This amendment is submitted to be fully responsive to the Office Action embodied in Paper No. 20070818. By way of this amendment, claim I has been amended to recite the cage member being bonded to the exterior wall of the elongated flexible member and to recite with greater specificity that in operation the cage member element functions to maintain adjacent heart tissue walls spaced apart from the radial openings to permit free flow of blood between the bore and the exterior of an elongated flexible body member through the radial openings. Support for the notion that the cage member is in fact bonded to the exterior of the elongated flexible body member is found in the specification at page 5, lines 12-14, and is not intended to change the scope of claim 1 but rather more accurately recite that the cage member simply cannot disengage from the elongated flexible body member while within a heart chamber. Support for permission of free flow of blood between the bore and exterior through the radial openings with the cage member not impeding blood flow is found in the specification inter alia at page 2, lines 6-8 and page 6, lines 14-17. As such, it is submitted that no new matter has been added to the application by way of this amendment.

Currently all of the pending claims, namely claims 1-9 and 11, stand rejected under 35 U.S.C. §103(a) over Jonkman (US 5,769,828) in view of Adler (US 4,158,916). Reconsideration and withdrawal of this rejection is requested in light of the above amendments to claim 1 and the following remarks. The basis of this rejection is that Jonkman discloses a basic venous cannula with the exception of lacking the recited cage member. Adler is cited to bolster the teachings of Jonkman in this regard with respect to reference numeral 34 of Adler being a cage member formed of a mesh screening having a plurality of longitudinal stringers and a plurality of annular rings in a common cylindrical plane disposed about the intake apertures 16,

Reply to Office Action of August 22, 2007

18, 20 and 22 (citing column 2, lines 50-55). The basis of the rejection would be the obviousness to one of ordinary skill in the art to modify the catheter of Jonkman to include cage members taught by Adler to prevent the apertures from being clogged thereby maintaining an open flow of material through the catheter. (Paper No. 20070818, section 3, page 2).

In response to this rejection. Applicant submits that the cage member of claim 1 is structurally distinct from the prior art reference combination and has functions that are completely different therefrom. Specifically, an inventive cage member is affixed or bonded to the exterior of the elongated flexible body member of the catheter according to pending claim 1. In contrast, the prior art reference combination which relies on Adler for teachings relevant to the cage member discloses a slip cover with respect to reference numeral 24 held in place by an elastic collar (reference numeral 11) (see column 2, lines 39-42). As such, it is respectfully submitted that the slip cover mesh 24 of Adler is not equivalent to the bonded aspect of the cage member. This difference would manifest in a profoundly different outcome for the invention of claim 1 as opposed to that of the prior art reference combination. While the cage member according to pending claim 1 is incapable of being removed from the elongate flexible catheter body member and as such cannot become stripped or otherwise lost within a vessel or heart chamber, the elastic collar supporting the mesh screen cover per Adler being formed from a flexible cloth material (column 2, lines 55-61) held in place by an elastic collar has a potential to be displaced from the catheter per Jonkman and depending on the location of lodgment could result in a lethal blockage of a vessel or heart chamber.

Additionally, pending claim 1 recites that the cage member functions to maintain blood flow between the body member bore and exterior even when the cage member is in contact with a heart tissue wall. In contrast, the prior art reference combination of Jonkman and Adler

necessarily results in filtration mesh covering the openings 16, 18, 20 and 22 per Adler. As this mesh necessarily emits fluid flow between the bore of the prior art reference combination device and the exterior, this limitation of pending claim 1 is likewise not apparent to one of ordinary skill in the art through resort to the prior art reference combination teachings.

Additionally, cage member recitations with respect to a plurality of longitudinal stringers and a plurality of annular rings with the annular rings attached to the outer surface of the stringers is again submitted to represent a relational structure that the prior art reference combination of Jonkman and Adler fails to provide. Rather, it is respectfully submitted that the nylon, rayon, wire or plastic screening mesh of Adler (column 2, lines 38-39) in Figures 2, 3, 5 and 9 of Adler would convey to one of ordinary skill in the art the understanding that the mesh in fact is woven. The woven mesh of Adler owing to the intertwining weave and weft fails to provide the standoff from the underlying apertures needed to maintain blood flow when such a mesh would be placed in contact with adjacent heart tissue walls and as such would fail to convey to one of ordinary skill in the art an appreciation for the importance of standoff between the cage member and the underlying apertures to maintain blood flow in a cardiac cannula.

In light of the above amendments and remarks, claim 1 is submitted to be nonobvious over the prior art of record. Reconsideration and withdrawal of the rejection as to claim 1 and those claims that depend therefrom under 35 U.S.C. §103(a) over Jonkman in view of Adler is requested. As to dependent claims 2-9 and 11, Applicant believes there exist separate bases for the allowability of the subject matter of the dependent claims and reserves the right to make such remarks of record at a later time.

Summary

Claims 1-9 and 11 are pending in the application. By way of this amendment, claim 1 has been amended. All the pending claims are now believed to be in allowable form and directed to patentable subject matter. Reconsideration and withdrawal of the rejection is requested.

Dated: November 21, 2007 Respectfully submitted,

By: /Avery N. Goldstein, Ph.D./
Avery N. Goldstein, Ph.D.
Registration No.: 39,204
GIFFORD, KRASS, SPRINKLE, ANDERSON
& CITKOWSKI, P.C.
2701 Troy Center Drive, Suite 330
Post Office Box 7021
Troy, Michigan 48007-7021
(248) 647-6000
Attorney for Applicant